Final

Finding of Suitability to Transfer Former Hamilton Army Airfield POL Hill

Prepared for

Department of the Army

October 2003

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FINDING OF SUITABILITY TO TRANSFER
Former Hamilton Army Airfield
POL Hill Parcel
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1. PURPOSE

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of the property, Petroleum, Oil, and Lubricant (POL) Hill, at the former Hamilton Army Airfield (HAAF) for transfer to the City of Novato, California for recreation/open space consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) and Department of Defense (DOD) policy. In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health and the environment after such transfer.

2. PROPERTY DESCRIPTION

The POL Hill Parcel property (also known as Outparcel A-1) consists of 7.84 acres. Five former buildings/structures and one current building are/were associated with this property. The buildings and structures are identified in Table 1 below. Site maps of the property are attached (see Figures 1 and 2 in Enclosure 1). An approximately 2 -acre portion of the POL Hill Parcel is located within the buffer zone for Landfill 26. The Army will retain title to this 2-acre portion of the POL Hill Parcel (within the buffer zone for Landfill 26) (see Figure 2) until such time as the Title for the Landfill is transferred. Therefore, the portion of the POL Hill Parcel that will be transferred in the near future consists of only 5.67 acres of the 7.84-acre POL Hill Parcel. Although the timing for transfer of the 2-acre portion of the POL Hill Parcel within the buffer zone may differ from the rest of the property, documentation for the transfer of the entire POL Hill Parcel (including the portion within the buffer zone for Landfill 26) is included in this FOST. The entire 7.84-acre parcel has been deemed suitable for transfer. Depending on the context, the term POL Hill Parcel in this document may refer to the entire 7.84-acre parcel or to the 5.67-acre portion which will be transferred.

TABLE 1
List of Past and Present Structures at POL Hill Parcel

Building/ Structure	Year Built	Area (ft^2)	Historical Use/Status
715	Late 1950s	Not Known	Listed as a "POL Stg Office" (may have been guard shelter according to information obtained in interviews). Removed by IT Corporation during remediation of the POL Hill Parcel between 1986 & 1991.
717	Late 1950s	Not Known	Water Separator House and Water Control Pit - Listed as "Pump Stn LF" (liquid fuel) and a Water Reservoir. These structures were located on top of tank farm. Demolished by IT Corporation in 1986 during tank removals, investigation, and remediation of the POL Hill Parcel.
736[1]	Late 1950s	1,496	Historically the "POL Fuel Management Office." Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
737[1]	Late 1950s	800	Historically a "POL Storage Building." Last used for temporary storage of waste oil. Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
738[1]	Late 1950s	2,596	Historically a maintenance building. Last used as a maintenance garage. Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
NA	1993	3,812	Groundwater treatment system for Landfill 26 (LF 26). The treatment system located in the building currently is not operational.

TABLE 1
List of Past and Present Structures at POL Hill Parcel

Building/ Structure	Year Built	Area (ft^2)	Historical Use/Status
Stairway	Late 1950s	~210	Two flight wooden stairway between AST-2 area and tank farm area. Currently use of stairs impaired by bushes.
Ramp	Late 1950s	~128	Truck loading/unloading dock and ramp made of concrete.
Former JP-4 Pumps	Late 1950s	396, 200, 81, 120	Liquid fuel pumps (labeled LF Pumps). Removed in 1986 and 1990 by IT Corporation during tank removals, investigations, and remediations of the POL Hill Tank Farm Area.
Fuel Pipelines	Late 1950s	NA	Buried and aboveground JP-4 fuel pipelines with diameters ranging from less than 2 inches to 10 inches. Most removed in 1986; additional piping removed in 1990 and 1997.

[1]The Environmental Assessment (EA) prepared by USACE March 1995 indicates buildings 736, 737 and 738 were built after 1950.
ft^2 square feet
NA Not applicable

3. ENVIRONMENTAL CONDITION OF THE PROPERTY

A determination of the environmental condition of the property has been made based on the following documents: (1) Final Community Environmental Response Facilitation Act (CERFA) Report, prepared for the Hamilton Army Airfield by Tetra Tech, dated April 1994; (2) Environmental Baseline Survey (EBS) for Hospital Hill and POL Hill prepared by CH2M HILL, dated November 2001; (3) the Baseline Human Health Risk Assessment, prepared by Engineering Science, Inc. (ESI), dated July 1993; (4) the Environmental Assessment for the Closure and Realignment of Hamilton Army Airfield, prepared by Jones and Stokes Associates, Inc., dated September 1991; (5) the Environmental Impact Statement for Hamilton Army Airfield Disposal and Reuse, prepared by the U.S. Army Corps of Engineers (USACE) with assistance from Jones and Stokes Associates, Inc., dated January 1995; (6) the Environmental Assessment, Remedial Work on BRAC Property, prepared by USACE, dated March 1995;(7) Investigation of Asbestos and Polychlorinated Biphenyls Buildings 736, 737, and 738 U.S. Army Reserve Center Hamilton Army Airfield Novato, California, by Harding Lawson Associates (HLA), dated October 8, 1991; (8) Final Closure and Post Closure Maintenance Plan, Hamilton Army Airfield Landfill 26 prepared by CH2M HILL, dated June 1999; (9) U.S. Department of Defense Program Base Realignment and Closure Ordnance, Ammunition and Explosives Archive Search Report Findings Hamilton Army Airfield Marin County, California prepared by U.S. Army Corps of Engineers (USACE) – St. Louis District, dated September 2001; (10) Groundwater Monitoring Report August 2002 POL HILL, Hamilton Army Airfield Novato, California prepared by SOTA Environmental Technology Inc., dated September 26, 2002, (11) Draft Closure Report, POL Hill Outparcel, Hamilton Army Airfield, prepared by CH2M HILL, dated April 2003, (12) Draft POL Hill AST-2 Area Corrective Action Plan, prepared by CH2M HILL, dated February 2003, (13) Petroleum Oil and Lubrication (POL) Area Corrective Action Plan/Preliminary Endangerment Assessment (CAP/PEA) for the BRAC Property, Hamilton Army Airfield prepared for the US Army Corps of Engineers by IT Corporation, August 1997, (14) Correspondence dated June 8, 1998 regarding “the most recent data package from the POL Hill Site” from Mr. Randall W. Hanna, Hamilton BRAC Environmental Coordinator to Mr. Ray Leclerc, Department of Toxic Substances Control; (15) California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Letter to U.S. Army concerning regulation of petroleum hydrocarbons, Petroleum Oil and Lubrication (POL) Area Corrective Action Plan/Preliminary Endangerment Assessment and June 8, 1998 Data Submittal, Base Realignment And Closure (BRAC) Property, Hamilton Army Airfield, California from Mr. Ray Leclerc to Mr. Randal Hanna, dated July 3, 1998, (16) Petroleum, Oil, and Lubricant Outparcel

Closure Report prepared by IT Corporation, dated December 1999, (17) Unpublished project notes, logs, and laboratory data from Remedial Action Landfill 26 Phase I contract with Environmental Health, Research, and Testing, Inc. (EHRT)– 1993 through 1995, (18) USACE "Environmental Assessment Remedial Work on BRAC Property" dated November 1994, (19) Correspondence dated April 22, 2003 regarding "Approval of the Human Health Risk Assessment regarding Volatile Organic Compounds (VOCs) in Soil Gas Near Hamilton Army Airfield Landfill 26, dated December 2002, Novato, California" from Ms. Theresa McGarry, Department of Toxic Substances Control, to Mr. Jim McAlister, USACE, (20) 1992 Explanation of Significant Difference (ESD), (21) California Integrated Waste Management Board, Letter to U.S. Army concerning FOST for Parcel POL Hill, dated June 18, 2003, (22) Human Health Risk Assessment (HHRA) for Volatile Organic Compounds in Soil Gas Near Hamilton Army Airfield Landfill 26, December 2002, prepared by CH2M HILL, (23) Workplan for Landfill 26 Buffer Zone/Hamilton Meadows Additional Soil Gas Investigation, Hamilton Army Airfield, prepared by ITSI in August 2001, (24) Appendix D, Workplan Addendum for Landfill 26 Buffer Zone/Hamilton Meadows Additional Soil Gas Investigation, Hamilton Army Airfield, prepared by ITSI in October 2001, and (25) Corrective Action Work Plan, Hamilton Army Airfield, GSA Phase I Sale Area, Revision 1, prepared by Woodward-Clyde Federal Services in 1995.

The information provided is a result of a complete search of agency files during the development of these environmental surveys.

3.1 Environmental Condition of Property Categories

The property is Category 2 under the Department of Defense Environmental Condition of Property (ECP) Categories. A description of the ECP Categories is provided in Enclosure 2.

3.2 Storage, Release, or Disposal of Hazardous Substances

There is no clear evidence that hazardous substances were stored, released, treated, or disposed at the POL Hill Parcel in excess of the reportable quantities and periods listed in 40 CFR Part 373. The USACE "Environmental Assessment Remedial Work on BRAC Property" dated November 1994 documents that "there were vacant buildings which were used for vehicle maintenance and temporary storage of waste oil prior to removal by a refuse company." Other labels on drums found at Building 737 in 1991 indicate other products were stored. In the Harding Lawson Associates (HLA) 1991 Investigation of Asbestos And Polychlorinated Biphenyls, Buildings 736, 737, and 738, U. S. Army Reserve Center, HLA reported, "Forty 55-gal drums were observed in an open area of the building [Building 737]. Some of the drums were labeled "oil", "hydraulic oil", "waste oil", and "waste solvent." Others were not labeled. All appeared to be empty. Three cylinder-type transformers were also observed. The transformers had been placed in metal or plastic containers." Four 55-gallon drums labeled as containing PCBs were observed in a closed area of the building [Building 737]. All the drums were removed from the building in 1993 before the start of the EHRT Remedial Action, Landfill 26, Phase 1 contract (CH2M HILL, 2001). Accordingly, there is a need for notification of hazardous substance storage. There is no evidence of releases, treatment or disposal on site in excess of reportable quantities (RQs). However, it has been assumed that these materials were stored in quantities above RQs so Table E3-1 has been provided as required. Table E3-1 (Enclosure 3) provides a listing of known hazardous substance storage. Hazardous substance storage operations no longer occur at the POL Hill Parcel.

The California Department of Toxic Substances Control (DTSC) reviewed the BRAC POL Area Corrective Action Plan/Preliminary Endangerment Assessment dated August 1997 and a data report dated June 8, 1998, and determined that the only contamination at the POL Hill Parcel site is related to petroleum fuel (DTSC, 1998).

3.3 Petroleum and Petroleum Products

3.3.1 Underground and Above-Ground Storage Tanks (UST/AST)

There were 21 underground and 5 aboveground storage tanks (UST/AST) on the property that were used for storage of petroleum products; the storage tanks were removed from the property in 1986 and 1990. AST-2 was an 840,000-gallon JP-4 jet fuel aboveground storage tank formerly located on the upper hillside bench of the POL Hill Parcel. Twenty 25,000-gallon JP-4 jet fuel USTs were formerly located in the lower tank farm area at the base of the hill. A gravity-fed pipeline connected AST-2 to the lower tank farm area. Five additional storage tanks were located at the POL Hill Parcel, a 25,000-gallon tank that stored "mogas" (automobile fuel) and later JP-4 jet fuel, and a 20,000-gallon AST that stored JP-4 jet fuel. A 750-gallon JP-4 UST was also located in the tank farm area near the fuel pump house and a 650-gallon AST labeled "flammable" with a NFPA 704 flammable liquid placard and a 2,500-gallon AST labeled "diesel fuel" were located east of Buildings 737 and 738. Petroleum product releases to soil and groundwater occurred in areas where aboveground or underground storage tanks were located, along transfer pipelines and where drums of waste oil were stored at the POL Hill Parcel. TPH-contaminated soil at concentrations greater than 100 milligrams per kilogram (mg/kg) was excavated to the extent possible (down to bedrock) from the areas of the former AST-2, at the tank farm, at the gravity-fed pipeline, and near former Buildings 736, 737, and 738.

Monitoring wells were installed at the POL Hill Parcel to investigate groundwater contamination (CH2M HILL, 2001). Historically, contaminated groundwater was detected in monitoring wells in the vicinity of AST-2 and near the former tank farm. Currently groundwater contamination is only detected in the vicinity of AST-2. The Army has proposed natural attenuation and monitoring as the final remedy for addressing the TPH-contaminated groundwater beneath the former location of AST-2. The Army is currently working with the lead regulatory agency, the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), to complete a corrective action plan for the groundwater contamination at the former AST-2 Area and a closure report for all other site features.

A summary of the petroleum product activities is provided in Table E3-2 – Notification of Petroleum Products Storage, Release, or Disposal (Enclosure 3).

3.3.2 Non-UST/AST Storage, Release, or Disposal of Petroleum Products

No storage of petroleum products in containers other than tanks is known to have occurred at the POL Hill Parcel. Storage of mixtures of petroleum-based substances, such as hydraulic oil and waste oil, and other hazardous substances, such as waste solvents and PCBs, are described in sections 3.2 and 3.4 of this document.

3.4 Polychlorinated Biphenyls (PCB) Equipment

Building 737 was reported to contain empty drums labeled PCBs as well as transformers (HLA, 1991). In 1990, transformers were removed from the POL Hill Parcel tank farm soil remediation area and were stored in Building 737 prior to its demolition in 1993.

Seven transformers (B7, B8, B9, C1, C2, C3, and H9) and six electrical switches were removed from the POL Hill Parcel under a Presidio of San Francisco contract prior to the construction of the Landfill 26 groundwater treatment plant. The construction removed "all evidence" of the transformers and switches except for Transformer H9. Transformer H9 was located on a concrete slab within a fenced enclosure. There was no evidence of leakage from the transformer (CH2M HILL, 2001).

As part of the EBS, staff from the Hamilton Army BRAC Office conducted a visual inspection on September 7, 2000 to assess the condition of transformer H9 located in the fenced area on the ridge to the south of the former tank farm at the POL Hill Parcel. Three cells that could have been step down transformer banks were visible inside the transformer box. Each cell had windings of cloth. The transformer was observed to be a dry cell type of

transformer (i.e., no cooling oil used). The transformer is located on a pad that appeared to support footings for a former light standard (CH2M HILL, 2001).

In 1991, HLA conducted an investigation of PCBs at Buildings 736, 737, and 738. The findings of this investigation are summarized below:

Building 736

In 1991, HLA noted that none of the light ballasts in the building were labeled non-PCB. No other electrical equipment or PCB issues were identified by HLA. This building was removed during construction of the Landfill 26 groundwater treatment plant (CH2M HILL, 2001).

Building 737

No light ballasts or other suspect electrical equipment were observed. Forty 55-gallon drums labeled hydraulic oil, waste oil, waste solvent, and other drums not labeled were observed in the building by HLA; all appeared empty. Three cylinder-type transformers were observed in the building also. The transformers had been placed in metal or plastic containers. Four 55-gallon drums labeled as containing PCBs were observed. The area in which the containers were located was bermed with an 8-inch concrete berm and a 12-inch spill trench. This building was removed during construction of the Landfill 26 groundwater treatment plant. The containers in the building were removed prior to demolition (CH2M HILL, 2001).

Building 738

In 1991, HLA noted that none of the light ballasts in Building 738 were labeled non PCB. HLA noted some may contain PCBs; however, none were leaking. No other suspect electrical equipment was identified by HLA. This building was removed during construction of the Landfill 26 groundwater treatment plant (CH2M HILL, 2001).

3.5 Asbestos

Based on the Occusafe 1989 Asbestos Survey for HAAF and the 1991 Investigation of Asbestos and Polychlorinated Biphenyls report by HLA, asbestos-containing material (ACM) was found in the following POL Hill Parcel buildings: Buildings 715, 736, and 738. The ACM included floor tiles, thermal insulation, ceiling tiles, and roofing material. ACM was not identified in Building 737 at that time. Later, ACM was identified in insulation paper at Building 737 before demolition of the building. Marcor, the abatement contractor, completed the removal work in July and early August of 1993 (Unpublished files, 1993). All ACM was removed from Buildings 715, 736, 737, 738 and other buildings near Landfill 26. Therefore, ACM currently does not pose a threat to human health or the environment because all asbestos that posed an unacceptable risk to human health was removed prior to the demolition of the buildings. There are no known releases of asbestos to the environment at the POL Hill Parcel.

3.6 Lead-Based Paint

Based on the age (constructed prior to 1978) of former Buildings 715, 717, 736, 737, and 738 and a stairway, these structures are presumed to have contained lead-based paint (LBP). The buildings were demolished and removed from the POL Hill Parcel, while the stairway remains. No former (Army) residential areas are included in the Property. Since no future residential reuse is anticipated, no soil sampling was performed to identify the potential presence of lead-based paint in the soil. However, because of the possibility that lead-based paint may be contained in the soil, the POL Hill Parcel will be subject to notice and restricted from residential reuse, until the soil is tested for the presence of lead-based paint, and if present, it is abated according to state and federal regulations. See Enclosure 5.

3.7 Radiological Materials

There is no evidence that radioactive material or sources were used or stored on the POL Hill Parcel.

3.8 Radon

A radon survey has not been conducted on HAAF Base Realignment and Closure (BRAC) property. Interviews with HAAF personnel, a review of applicable environmental documents, and adjacent property radon survey results indicate that radon is not a concern at HAAF. Test data and survey results for the adjacent Navy property (housing) indicated radon below U.S. Environmental Protection Agency (USEPA) recommended action levels of 4 picocuries per liter (pCi/L). Information provided by U.S. Geologic Survey representatives indicate that radon is not found in the region due to the geology of the area. Therefore, radon is not considered to be an environmental concern at HAAF.

3.9 Unexploded Ordnance

Based on a review of existing records and available information, none of the former buildings or land within the POL Hill Parcel are known to have contained unexploded ordnance (USACE, 2001).

3.10 Other Hazardous Conditions

Due to the POL Hill Parcel's location, to the south and east of and adjacent to Landfill 26, a portion of the POL Hill Parcel lies within the buffer zone for the landfill. Methane gas has been detected in perimeter landfill gas monitoring probes located within the landfill buffer zone. While it is unclear if the methane gas was generated by the landfill, there is still the potential landfill gas could migrate offsite onto the POL Hill Parcel. In addition, groundwater beneath the landfill may become contaminated with hazardous constituents that leach from the landfill. Groundwater generally flows south to north under the landfill and around the POL Hill Parcel area. However, impacted groundwater from the landfill may migrate beyond the landfill boundary but generally in the direction away from the POL Hill Parcel.

There are several existing Regional Water Quality Control Board Orders (i.e., WDR 96-113, CAO 01-139, and TSO 01-140) that affect both the landfill site and the buffer zone. In addition, the groundwater treatment plant falls within the domain of these orders. While the groundwater extraction and treatment system has never been operated beyond initial startup, Order No. 96-113 specifically requires that the groundwater extraction well system and groundwater treatment plant be maintained so that they can be operated as needed.

A more detailed description of conditions at Landfill 26 is provided below.

3.11 Adjacent Hazardous Conditions

Based on the land use surrounding the POL Hill Parcel, Landfill 26 is the only area of concern with respect to the potential presence and migration of contaminants to the POL Hill Parcel. Landfill 26 has been inactive since 1974, when Hamilton was listed as surplus property and was officially closed in 1995 following a Record of Decision (ROD) signed in August 1989. Based on the alternative selected in the ROD and a 1992 Explanation of Significant Difference (ESD), a modified remedy consisting of a RCRA-type landfill cap was designed and constructed (CH2M HILL, 2001). A 150- to 200-foot buffer zone was established around the perimeter of the landfill, which extends into the westernmost portion of the POL Hill Parcel. No permanent structures or activities that would alter surface water flow to the landfill are permitted in this buffer zone.

In addition, Title 27 of the California Code of Regulations, Section 21190, Postclosure Land Use, requires that "All proposed postclosure land uses, other than non-irrigated open space, on sites implementing closure or on closed sites shall be submitted to the EA (Enforcement Agency), RWQCB (Regional Water Quality Control Board), local air district and local land use agency. The EA shall review and approve proposed postclosure land uses if the project involves structures within 1,000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste." Title 27 further requires that all on-site construction within 1,000 feet of the boundary of any disposal area be designed and

constructed to prevent gas migration into the building unless an exemption has been issued. The building must be designed and constructed with an impermeable layer to landfill gas, a permeable gas collection layer with vent piping, automatic methane gas sensors both within the gas collection layer and inside the building, or an approved equivalent system. In addition, periodic monitoring must be conducted inside both buildings and underground utilities to monitor for potential migration of landfill gas. These requirements apply to structures built on landfill property, and do not pertain to adjacent properties. However, construction within 1,000 feet of the landfill will need to comply with Title 27 requirements (CIWMB, 2003).

Several existing Regional Water Quality Control Board Enforcement Orders (i.e., WDR 96-113, CAO 01-139, and TSO 01-140) pertain to activities at or adjacent to the landfill. Order No. 96-113 requires that groundwater, adjacent geologic units, and adjacent properties be protected from migration of wastes and pollutants, as well as maintenance of the groundwater extraction well system and groundwater treatment plant at the landfill so it may be operated in the event pollutants are detected in the groundwater.

According to the Final Environmental Baseline Survey for Hospital Hill and POL Hill, prepared in November 2001, data are available for Landfill 26 from a variety of studies and investigations performed since 1995 (CH2M HILL, 2001). Groundwater has been monitored at the landfill under an approved monitoring program since 1993 in accordance with RWQCB waste discharge requirements (Order No. 92-029). Contaminant concentrations and groundwater elevation trends are well established for the landfill and surrounding areas. Contaminant concentrations in groundwater have not varied significantly since 1993 (CH2M HILL, 2001). Previous investigations concluded that Landfill 26 has had an impact on groundwater and, possibly surface water and sediment, but that these impacts were not found outside the Landfill 26 boundary (CH2M HILL, 2001), or were mitigated in the case of surface water and sediment. Groundwater elevations are generally higher at or near the southern portion of the landfill, including the POL Hill Parcel area, and decrease further to the north. Because the impacts to groundwater, and potentially surface water and sediments, are limited to the boundary of the landfill, and since the groundwater flows are generally adjacent to or away from the POL Hill Parcel area, groundwater, surface water, and sediments at Landfill 26 are not likely to have an adverse impact on the POL Hill Parcel (CH2M HILL, 2001).

Several monitoring programs and investigations of methane gas have been conducted to monitor and evaluate the potential for migration of landfill gas from the landfill, through the buffer zone, and onto adjacent properties. Based on the results of a few monitoring events and investigations, the RWQCB issued CAO 01-139 requiring, among other things, control of releases of landfill gases from the landfill. Between January and August of 2002, in response to earlier correspondence with the RWQCB, an “interim” gas migration control trench was installed within the buffer zone along the southern boundary of the landfill. The northeasterly portion of the trench is located within the POL Hill Parcel. Preliminary sampling results from the outboard side of the trench suggest an improvement in methane gas levels to below action levels. Final determination of the cause of methane gas within perimeter gas probes in the buffer zone, or of the effectiveness of this trench, has not been made to date.

In December of 2002, a Human Health Risk Assessment (HHRA) for VOCs in Soil Gas was completed (CH2M HILL, 2002). The risk assessment was based upon the results of soil gas investigations performed in the Hamilton Meadows subdivision, which is located adjacent to the landfill buffer zone. In addition, soil gas investigations were conducted in the Hamilton Meadows subdivision and in the landfill buffer zone in accordance with a work plan developed in August 2001 (ITSI, 2001a) and modified in October 2001 (ITSI, 2001b). The HHRA evaluated the potential for exposures and potential for adverse human health effects associated with the occurrence of VOCs at the site and the adjacent residential development. Excess lifetime cancer risks higher than $1x10^{-6}$, but less than $1x10^{-4}$, were found at three locations south of the landfill and southwest of the POL Hill Parcel area. The conclusion of the risk assessment was that there was not an indication of the presence of current or future threats to human health for individuals in the residential area. In addition, subsequent to submittal of the report, and per a

letter from DTSC, it was concluded that the risk presented in the HHRA was likely overstated because it was based on the use of EPA cancer potency toxicity criteria for 1,3-butadiene that has subsequently been revised by EPA. The risk for two of the three sites is now predicted by DTSC to be less than $1x10^{-6}$, using the new EPA criteria (DTSC, 2003). The lack of potentially significant human health risks at the residential development strongly indicates that there is also a lack of potential human health risks to recreational users at the POL Hill Parcel.

The landfill has ceased operation and is currently being monitored by the U.S. Army Corps of Engineers (CH2M HILL, 2001). A buffer zone around Landfill 26 extends approximately 150 to 200 feet into the northwestern portion of the POL Hill Parcel parcel. Restrictions on use in the buffer area are included in the Environmental Protection Provisions (Enclosure 5). As noted in Section 2, the Army will retain title to this portion of the POL Hill Parcel until such time as the landfill is transferred.

Additional information on the landfill may be found in the Army's 2001 and 2002 Methane Remedial Measures Studies for Landfill 26 and in the Army's 2002 Final Workplan for Installation of Interim Landfill Gas Migration Control Trench.

4. REMEDIATION

The POL Hill Parcel is adjacent to the General Services Administration (GSA) Phase I property at HAAF. For this reason the GSA Phase I Residential Cleanup Goals (RCG) were used to determine the adequacy of the remedial actions at the POL Hill Parcel.

TPH contaminated soil was detected at the POL Hill Parcel. The petroleum storage tanks and associated pipelines and structures were removed from the POL Hill Parcel. In addition, excavation activities were conducted at the locations of the former AST-2 and tank farm to remove (to the extent possible, i.e. down to bedrock) impacted soils where TPH concentrations were greater than 100 mg/kg. Soils in excess of 100 mg/kg at the location of Landfill 26 groundwater treatment plant were also removed to the extent practicable (i.e., down to bedrock). The GSA Phase I RCG for TPH measured as diesel in soils is 200 mg/kg while the RCG for TPH as gasoline is 100 mg/kg (Woodward-Clyde, 1995), therefore soils remediation is considered complete.

TPH contaminated groundwater was detected at the POL Hill Parcel at levels greater than the GSA Phase I RCGs of 1200 ug/L for TPH measured as diesel and 600 ug/L for TPH measured as gasoline. Since there is no RCG for TPH measured as JP-4, and given the age of the product being analyzed, the results of groundwater analysis for all petroleum hydrocarbons were added together and a total TPH RCG of 1,200 ug/L was used as the cleanup standard (CH2M HILL, 2003). The groundwater at the former tank farm area was remediated with the removal of contaminated soil (ESI, 1993). A draft closure report for the tank farm by CH2M HILL, entitled *Draft Closure Report POL Hill Outparcel, Hamilton Army Airfield*, was submitted to the Regional Water Quality Control Board in April 2003.

Groundwater monitoring associated with the POL Hill Parcel AST-2 Area was first completed in 1992 (IT, 1999). A comprehensive groundwater-monitoring and sampling program including quarterly, semiannual, and annual sampling schedules was developed for the POL Hill Parcel (including the AST-2 Area) in 1997 (IT, 1999). All groundwater samples were analyzed for TPH-purgeable (total petroleum hydrocarbons - gasoline), TPH-extractable (total petroleum hydrocarbons - diesel), BTEX (benzene, toluene, ethylbenzene, and xylenes), lead, and PNAs (poly nuclear aromatic hydrocarbons). However, the only constituent consistently detected above the cleanup level (i.e., GSA Phase I RCGs) were the TPH analytes. The BTEX, lead, and PNA concentrations were either not detected or were below RCGs. Beginning with the January 1999 monitoring event, the samples were analyzed only for TPH-purgeable and TPH-extractable. The only wells with combined TPH detections exceeding the GSA Phase I RCG of 1200 ug/L were PL-MW-101 and MW-POLA-121. Each of these wells is located within approximately 80 feet of the former AST-2 location (IT, 1999).

Contamination in excess of the GSA Phase I combined TPH RCG of 1200 ug/L remains in the groundwater in the area of former AST-2. An additional three rounds of groundwater sampling has been performed through August 2002 (SOTA, 2002). The SOTA results support the conclusion that the TPH-contaminated groundwater in bedrock fractures is relatively stable in the area of the former AST-2 and that natural attenuation is occurring. TPH concentrations appear to fluctuate seasonally, with the highest concentrations occurring in the winter and the lowest in the summer. These results suggest that a decrease of residual soil contamination dissolution near the capillary fringe resulting from the drop in the water table and /or the degrading of dissolved TPH in groundwater through natural attenuation processes may be occurring during the dry season (SOTA, 2002). The highest TPH concentration measured to-date in well MW-101 is 16,000 ug/L, which was collected in February 2002. The next highest concentration measured was in February 1997, at a concentration of 11,400 ug/L. The lowest concentration of total TPH detected in MW-101 was 3,900 ug/L in July 1998. Monitoring for BTEX was last conducted in October 1998. MW 101 contained 39 ug/L ethylbenzene and 47 ug/L xylenes at that time. These concentrations are well below the Phase I RCGs of 1,924,000 ug/L for ethylbenzene and 20,299,000 ug/L for xylenes (CH2M HILL, 2003a).

The Army has proposed monitored natural attenuation as a final corrective action to address the residual groundwater contamination beneath the former AST-2. The proposed corrective action is described in a plan prepared by CH2M HILL, entitled *Draft POL Hill AST-2 Area Corrective Action Plan*, dated February 2003, that has been submitted to the Regional Water Quality Control Board for review (CH2M HILL, 2003a).

5. REGULATORY/PUBLIC COORDINATION

The RWQCB, USEPA Region 9, DTSC, and the public were notified of the intent to sign the FOST. The FOST was made available for a 30-day public review period beginning June 30, 2003. The public notice was published in the Marin Independent Journal and the Novato Advance. The FOST was made available for public review at the following locations:

Hamilton Administrative Record Library
Hamilton Army Airfield
1 Burma Road
Novato, CA 94949
415-883-6386

The Main Branch of the Novato Public Library
1720 Novato Blvd.
Novato, CA 94947
415-898-4623

Also online at: http://www.spk.usace.army.mil/cespk-pm/haaf/docs.html

A copy of the regulatory/public comments has been provided (see Enclosure 6).

6. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE AND CONSISTENCY WITH LOCAL REUSE PLAN

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA). The results of this analysis have been documented in the Environmental Assessment for the Closure and Realignment of Hamilton Army Airfield (HAAF), CA, dated September 1991, and in the Environmental Assessment, Remedial Work on BRAC Property, dated March 1995. No encumbrances or conditions necessary to protect human health or the environment were identified in the above studies. The adopted local reuse plan, indicates that the intended reuse of the parcel is for recreation and open space. The proposed transfer is consistent with this intended reuse.

7. ENVIRONMENTAL PROTECTION PROVISIONS

On the basis of the above results from the Hospital Hill and POL Hill Environmental Baseline Survey and other environmental studies and in consideration of the intended use of the Property, certain terms and conditions are required for the proposed transfer (CH2M HILL, 2001). These terms and conditions are set forth in the attached Environmental Protection Provisions (Enclosure 5) and will be included in the deed**.**

California Civil Code Section 1471 allows grantees of real property to place covenants that will "run with the land" (i.e., that will apply to all subsequent property owners) on the property being transferred. These covenants can place environmental restrictions on the property to be transferred if the covenant is "reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials."

8. FINDINGS OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that all Department of Defense requirements to reach a FINDING OF SUITABILITY TO TRANSFER the property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions (Enclosure 5). All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA section 120(h)(3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain:

- The covenant under CERCLA §120(h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the Property has been taken before the date of transfer.
- The covenant under CERCLA §120(h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the property shall be conducted by the United States.
- The clause as required by CERCLA §120(h)(3)(A)(iii) granting the United States access to the property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under the CERCLA Section 120(h) and DOD FOST Guidance, notification of hazardous substance activities and petroleum product activities shall be provided in the deed. See Enclosure 3 – Notice of Hazardous Substance and Petroleum Storage, Release, or Disposal.

UNITED STATES OF AMERICA

JAN 15 2004

By: Donald L Bohannon

for GLYNN RYAN
Chief, Atlanta Field Office
Headquarters Department of the Army
Base Realignment and Closure
Fort McPherson, GA

6 Enclosures:

Encl 1 Figures : Figure 1 – Location Map - POL Hill Parcel; Figure 2 – Site Map – POL Hill Parcel
Encl 2 Environmental Condition of Property Categories
Encl 3 Notice of Hazardous Substance and Petroleum Product Storage, Release, or Disposal
Encl 4 ACM Removal and Cleanup Activities
Encl 5 Environmental Protection Provisions
Encl 6 Regulatory/Public Comments and Installation Position on Unresolved Comments